SIEMENS

Data sheet 5SY4425-6



Miniature circuit breaker 400 V 10kA, 4-pole, B, 25A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	4
design of pole	4P
tripping characteristic class	В
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui)	
 with single-phase operation at AC rated value 	440 V
 with multi-phase operation at AC rated value 	440 V
supply voltage with single-phase operation at AC rated value	230 V
Supply voltage	
supply voltage	
 at AC rated value 	400 V
 at DC rated value 	60 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
 at DC according to IEC 60947-2 rated value 	15 kA
 according to EN 60898 rated value 	10 kA
 according to IEC 60947-2 rated value 	20 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	2.4 W
suitability for operation	Mechanical engineering / industry
Product details	
product component	
combined terminal top	Yes
combined terminal bottom	Yes
 neutral conductor switching 	No
product feature	

 properties for main switches in accordance with EN 60204-1 	Yes
halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
short-circuit current breaking capacity (Icn)	
 at AC according to UL 1077 and CSA C22.2 No.235 	5 kA
Connections	
connectable conductor cross-section solid	
• minimum	0.75 mm ²
• maximum	35 mm ²
connectable conductor cross-section stranded	
minimum	0.75 mm²
maximum	35 mm ²
connectable conductor cross-section finely stranded with core	- CC 111111
end processing	
• minimum	0.75 mm²
• maximum	25 mm²
AWG number as coded connectable conductor cross section	
• minimum	18
• maximum	4
tightening torque [lbf-in] with screw-type terminals	
• minimum	22 lbf-in
• maximum	31 lbf-in
tightening torque with screw-type terminals	
• minimum	2.5 N·m
• maximum	3.5 N·m
position of power supply cord	Any
Mechanical Design	•
height	90 mm
width	72 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
fastening method	Quick assembly system
mounting position	any
net weight	622 g
Environmental conditions	022 9
	may 050/ to 55°C may 550/ to 70°C may 250/ to 75°C
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
standard	IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	40.00
• minimum	-40 °C
• maximum	70 °C
ambient temperature during storage	40.00
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
General Product Approval	

Confirmation









Miscellaneous

General Product Approval	EMC	Declaration of Conformity	Test Certificates
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Miscellaneous

Test Certificates

Marine / Shipping

Special Test Certificate











other Railway Environment

Miscellaneous Confirmation Vibration and Shock Confirmation Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY4425-6

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/5SY4425-6

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

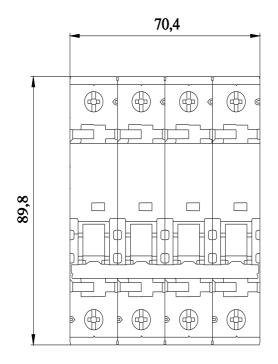
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4425-6

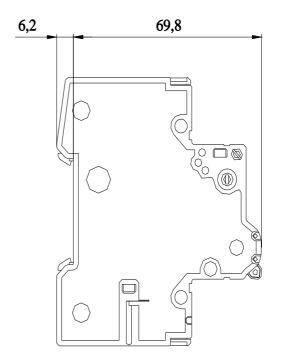
CAx-Online-Generator

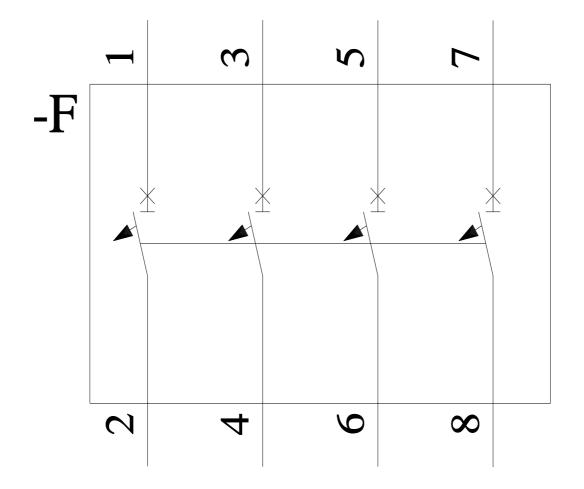
http://www.siemens.com/cax

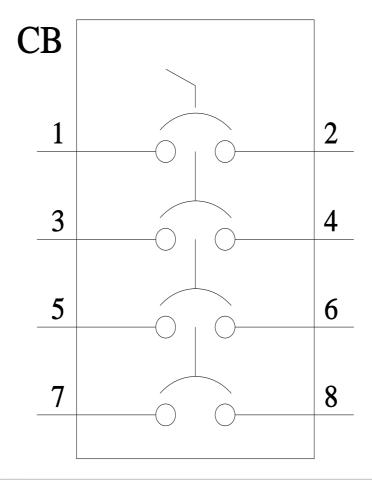
Tender specifications

http://www.siemens.com/specifications









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